

Date: Wednesday, 2/20/2008 4:23:25 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: EXTRUSION 'I' BEAM TUBE 4"
Job Number	: 37544		
Estimate Number	: 10154		
P.O. Number	:	Part Number	: D25001190
This Issue	: 2/20/2008 S.O. No. :	Drawing Number	: D2500 REV G
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : PURCHASED PARTS	Drawing Revision	: G
Previous Run	: 34729	Material	:
Written By	:	Due Date	: 3/17/2008 Qty: 80 Um: Each
Checked & Approved By	: <u>08 02 21</u>		
Comment	: Est: G 02.09.05 Added DSK 066 KJ/RF est H 07.07.06 rev G dwg EC		

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 5770

C 208102/21

- a) Extrude as per Dwg D2500
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 38 ksi
- e) ~~Minimum~~ elongation = 8%
- f) Order at 190" long
- g) Bon L Canada Inc. tool # 897105
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

(80)

2.0

D25001190P

Ext'n - 'I' Beam Tube 4"



Comment: Qty.: 1.0000 Each(s)/Unit Total: 80.0000 Each(s)
 EXTRUSION 'I' BEAM TUBE 4"

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
 Ensure material certification is attached

C 8/3/17 (83)

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Inspect dimensions per Dwg D2500
 Check Pull test per Dwg D2500 for compliance page attached.

08 03 20
 (83)
 37
 46
 23

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 2/20/2008 4:23:25 PM

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: EXTRUSION 'I' BEAM TUBE 4"

Job Number: 37544

Part Number: D25001190

Job Number:



Seq. #:

Machine Or Operation:

Description :

Check hardness with Webster tester

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: Back Hall

BB 08/03/27 X53

6.0

QC21

FINAL INSPECTION/W/O RELEASE



83

Comment: FINAL INSPECTION/W/O RELEASE

208/03/27

Job Completion



MF

08-03-27

U

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	<i>[Signature]</i>	DRAWN BY	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D2500	REV. G SHEET 1 OF 3
DATE	07.04.17			TITLE EXTRUSION	SCALE NTS
A	96.03.19			NEW ISSUE	
B	96.03.24			CHANGE INTERNAL WEB	
C	96.04.26			ADD D2500-3 WEB	
D	96.10.07			ADD MATERIAL PROPERTIES	
E	96.10.24			CHANGE MATERIAL TEMPER	
F	97.09.29			CHANGE MAT. TO 6061-T6	
G	07.04.17			ADD NOTES 3,5,6	

RELEASED
07.06.28 *[Signature]*

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO
ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY
TO ENSURE THAT THE BATCH MEETS THE ABOVE
MINIMUM MECHANICAL PROPERTIES

2. BREAK ALL SHARP CORNERS 0.010 MAX

3. ALL DIMENSIONS ARE IN INCHES

4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE
NOTED.

5. FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS
CUT LENGTH (EX. D2500-1-190 IS 190" LONG)
D2500-1 EXTRUSION MANUFACTURED FROM:

- A) BON L DIE # 897015 -> PREFERRED
- B) CARADON MIDEAST DIE # PAH-28030
- C) CARADON MTL DIE # MH-18868

6. FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS
CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG)
D2500-3 EXTRUSION MANUFACTURED FROM:

- A) CARADON INDALEX DIE # MS-18867

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NO. 37544

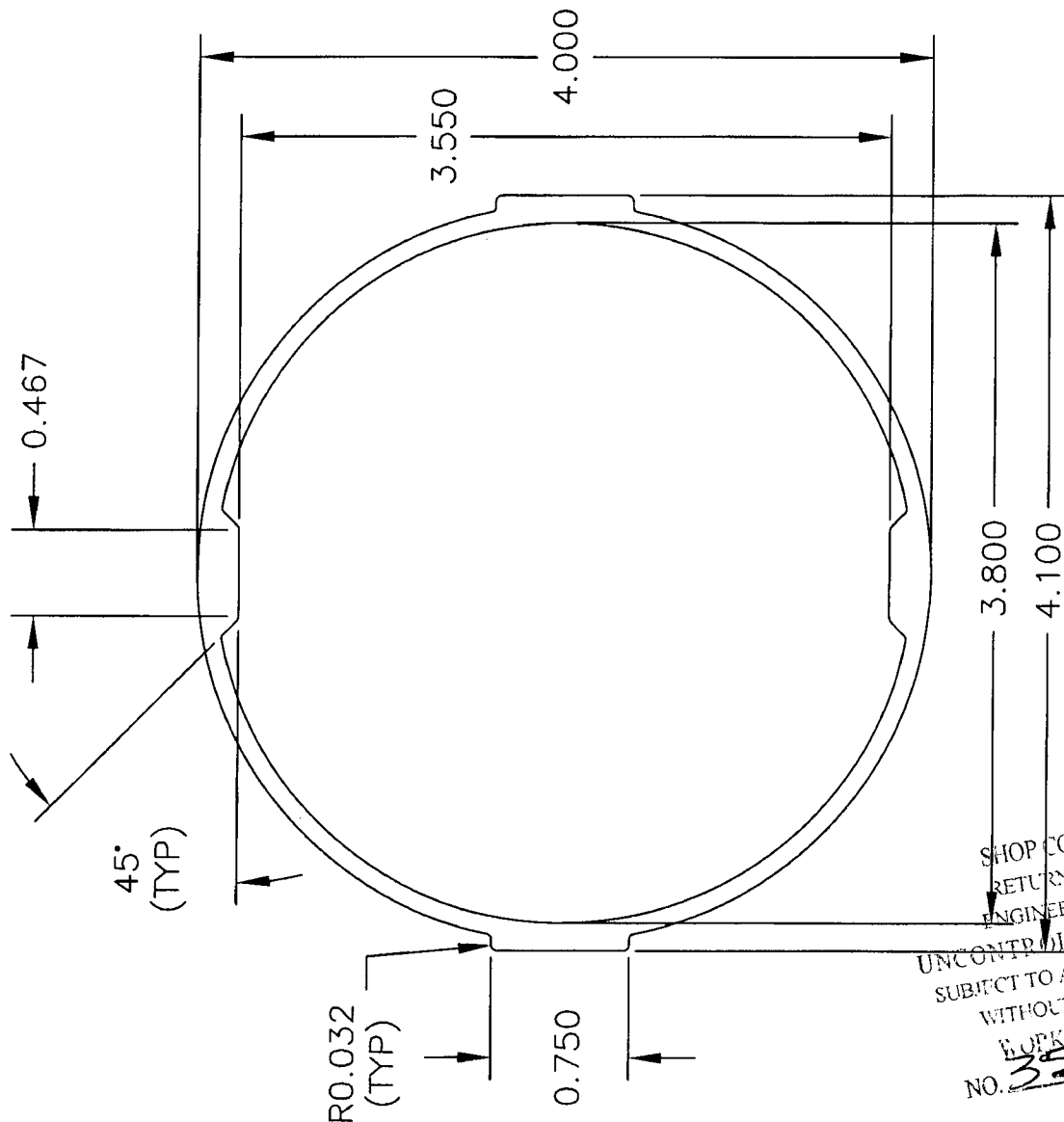
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DESIGN #	DRAWN BY RH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2500	REV. G SHEET 2 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28 #



D2500-1

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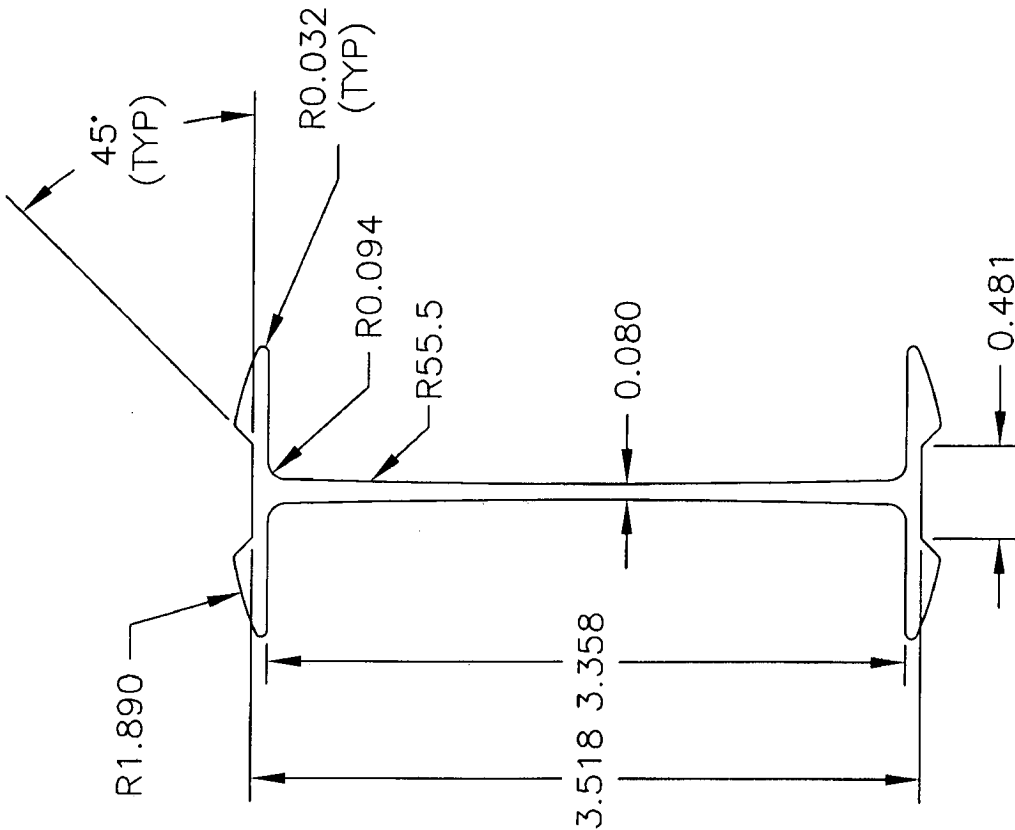
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CHECKED #	APPROVED #	DRAWING NO. D2500	REV. G SHEET 3 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28 #



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INVOICING COMPANY AND LOCATION
SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

SHIPPING MANIFEST

ACCT# 00046024

SHIP TO DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN	SOLD TO / PURCHASER DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN
PHONE 613-632-5200	PHONE 613-632-5200

TERMS / FREIGHT
O / P

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE

MANIFEST DATE 03-16-08
MANIFEST NUMBER 637736
SALES ORDER NUMBER 25906

CREDIT REP HAMBROOK, PAU 905-508-3250	SALES REP
FIELD SALES REP Kutter A 450-435-6551	CUST SERVICE REP Burton D 905-427-2227
BILL OF LADING NUMBER 08375540	

CUSTOMER ID 46024	ORDER DATE 02/25/08	CUSTOMER PO NUMBER 5770
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JOB

08375540												
ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER	ALLOY & TEMPER	FINISH DESCRIPTION	THIS SHIPMENT			UNIT	QUANTITY DUE	
				CUSTOMER PART NUMBER	LENGTH	FABRICATION DESCRIPTION	NBR OF PKGS	GROSS POUNDS	NET QUANTITY			
					CUTTING TOLERANCE	SHIPPING TOLERANCE						
01	80	KG	0	DAA-897105-2	6061 /T6	MILL	4	1086	1054	KG	0	
		M	0	D2500-1-190	190"	CERTIFICATE OF COMP			400.56	M	0	
		PC	0		+5/16 "	(+010-010,0088-0072)			83	PC	0	
					-0 "							
					LOT/TKT DETAIL:		25906010 / 264981	1	301	293		23 PC
							25906010 / 264982	1	301	293		23 PC
							25906010 / 264983	1	301	293		23 PC
							25906010 / 264984	1	183	175		14 PC
<div>83</div> <div>PC</div>												

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert Date	Cert No	Sales Order	Page
03/16/08	174785	25906	1
Cast PO	B/L No	Lot	Date
5770	08375540	25906010	3/16/08

Sold To	Ship To
DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897105-2	190" Mill 6061 T6	D2500-1-190
Gross Weight	1086 KGS		
Net Qty	1,054 KG	83 PC	401 M 4 PKG

Specification	Die Desc
AMS-QQ-A-200/8 & ASTM B221-06	

Mechanical Tests:						
Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW	
1	302.7 / 43.9	273.1 / 39.6	9.9	.0	92	
2	303.6 / 44.1	271.5 / 39.4	9.6	.0	92	

Chemical Analysis:							
SI	FE	CU	MN	MG	CR	ZN	TI
.66	.26	.25	.09	.84	.07	.05	.01
.61	.28	.25	.06	.89	.05	.05	.02

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

Conchita Ko, QA Manager Signature Aluminum Canada Inc

